

ZS-30 Spindle Unit Replacement Manual (for the JWX-30)

Included Items



How to Replace

- ⚠ WARNING** Disconnect the power cord before performing replacement. Attempting such operations while the machine is connected to a power source may result in injury or electrical shock.
- ⚠ CAUTION** When performing replacement, be sure to keep the tool detached. Contact with the blade may cause injury.
- ⚠ CAUTION** Never touch the spindle unit immediately after machining. Doing so may cause burns.

1. Getting Ready for Replacement

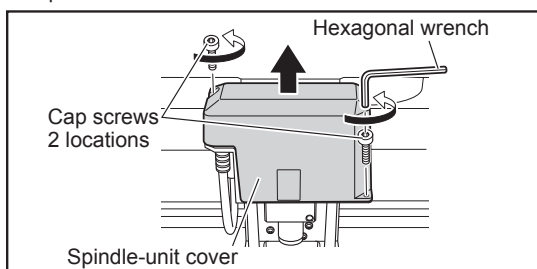
Carry out the following preparations.

- Have on hand the hexagonal wrench that came with the main unit.
- Remove the tool and collet.
- Move the spindle head to the VIEW position.
- When you've finished making the preparations just described, turn off the machine's power switch and unplug its power cord from the electrical outlet.

For more information about how to remove the tool and the like and how to move the spindle head, refer to the user's manual included with the main unit.

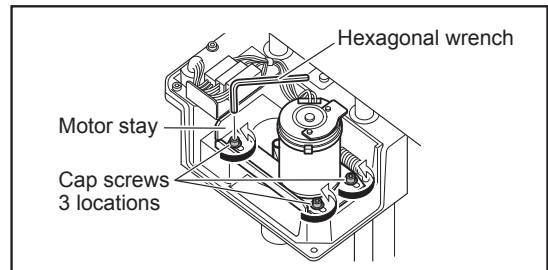
2. Removing the Spindle Unit

- ① Remove the spindle-unit cover.**
Remove the cap screws at the two locations and detach the spindle-unit cover.



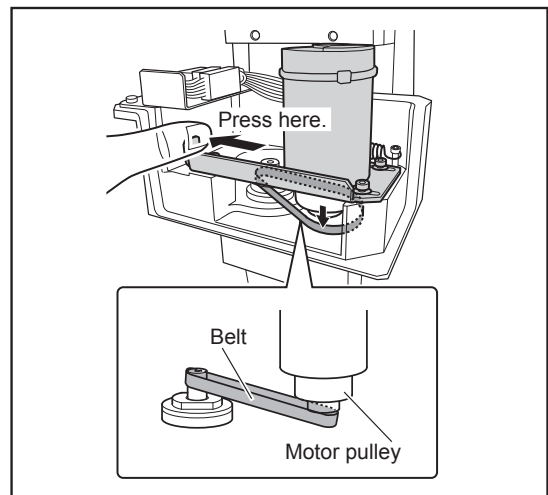
- ② Loosen the cap screws securing the motor stay in place.**

Loosen the cap screws at the three locations.



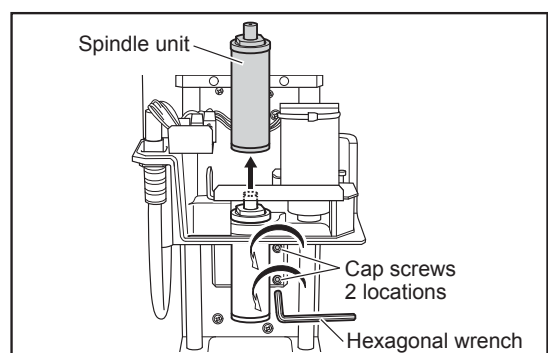
- ③ Remove the belt.**

Press the location shown by the arrow in the figure toward the left side of the unit to loosen the belt, and remove the belt.



- ④ Remove the spindle unit.**

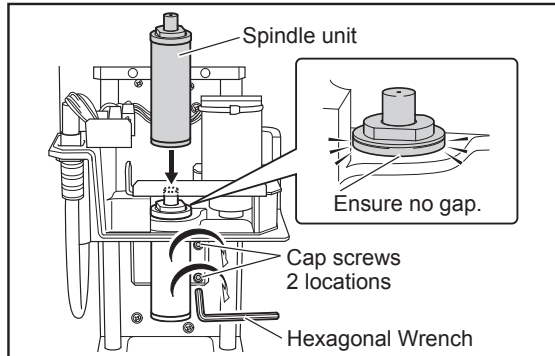
Loosen the two cap screws securing the spindle unit in place, then pull out the spindle unit.



3. Installing the Spindle Unit

1 Mount the spindle unit.

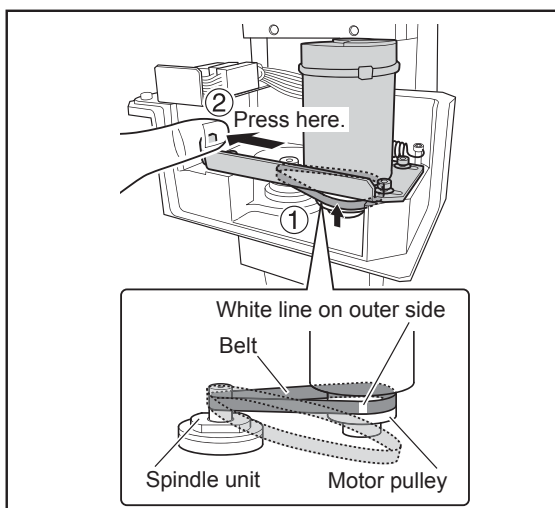
Insert the spindle unit, then secure it in place using the cap screws at the two locations. The appropriate tightening torque is 0.8 N-m (8 kgf-cm).



2 Engage the belt first on the spindle unit, and then on the motor pulley.

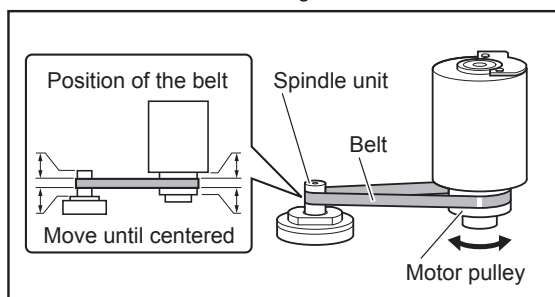
Orient the belt so that the white line is on the outer side.

- ① Engage the belt on the spindle unit.
- ② Press the location shown by the arrow in the figure toward the left side of the unit to loosen the belt, and engage the belt on the motor pulley.



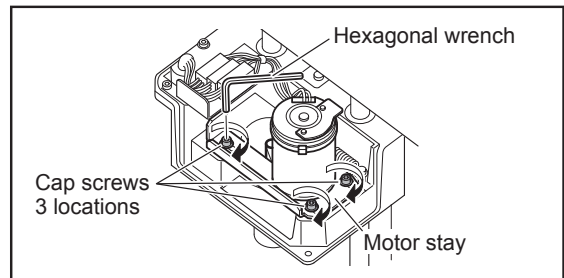
3 Adjust the position of the belt.

Turning the motor pulley makes the belt move. Turn the motor pulley either clockwise or counterclockwise until the belt reaches the location in the figure below.



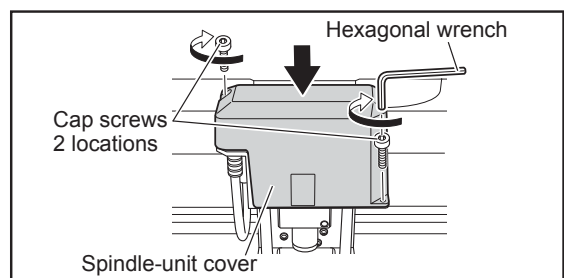
4 Secure the motor stay in place.

Tighten the cap screws at the three locations. The appropriate tightening torque is 0.8 N-m (8 kgf-cm).



5 Attach the spindle-unit cover.

Tighten the cap screws at the two locations to attach the spindle-unit cover.



4. Spindle Run-in

Perform running-in operation for the spindle unit.

Immediately after replacing the spindle unit, carry out steps 1 through 3 below to run in the spindle. Failure to do so may result in unstable spindle rotation. For information on how to rotate the spindle, refer to the user's manual for the cutting machine.

Step1

Speed: 6,000 rpm

Rotation time: 20 minutes

Step2

Speed: 15,000 rpm

Rotation time: 20 minutes

Step3

Speed: 30,000 rpm

Rotation time: 20 minutes